IN THE CLAIMS:

Please amend claims 1-16 and add claims 17-20 as follows:

1. (Currently Amended) ~~A~~ method of generating an auxiliary symbol ~~(Sh)~~ when a digital signal ~~(s)~~ locked to a quadrature signal pair ~~(I, Q)~~ is received, the method comprising the steps of:

~~a)~~ determining nominal radii ~~(Rs)~~ and range limits~~,~~ ~~particularly radii limits (Rg),~~ according to predetermined positions ~~(Sm,n)~~ of the digital signal ~~(s)~~ in ~~the~~ a plane determined by the quadrature signal pair ~~(I, Q)~~;

~~b)~~ determining a preliminary symbols ~~(S)~~ from the digital signal ~~(s)~~ by sampling the digital signal as controlled by a symbol sampling clock ~~(ts)~~;

~~c)~~ determining ~~the~~ polar coordinates ~~(R, a)~~ of the preliminary symbol ~~(S)~~; and

~~d)~~ determining a nominal radius ~~(Rsi)~~ from the polar coordinates of the preliminary symbol ~~(R, a), particularly from the radius component (R),~~ according to the range limits, where the determined nominal radius and an angle component define polar coordinates of the auxiliary symbol in the plane of the quadrature signal pair~~; and~~

~~e) the nominal radius (Rsi) and the angle component (a) define the polar coordinates of the auxiliary symbol (Sh) in the plane of the quadrature signal pair (I, Q)~~.

2. (Currently Amended) The method of claim 1, further comprising the step of converting ~~wherein~~ the polar coordinates ~~(Rsi, a)~~ of the auxiliary symbol ~~(Sh) are converted~~ into a Cartesian coordinate system determined by the quadrature signal pair ~~(I, Q)~~.

3. (Currently Amended) The method of claim 1, where~~in~~ the digital signal ~~(s) is~~ comprises a digitized signal ~~(sd) which is digitized by a sampling and digitization device (3) locked to a~~

~~digitization clock (td), and that for the formation of the preliminary symbol (S)~~, and where the method further comprises the step of ~~a~~ temporally interpolati~~o~~ng ~~of~~ the digitized signal ~~(sd) takes place in the sampling device (10)~~ as a function of ~~a~~the respective instant of the symbol sampling clock ~~(ts)~~ when ~~a~~the digitization clock ~~(td)~~ and the symbol sampling clock ~~(ts)~~ are independent of each other ~~in frequency and/or phase~~.

4. (Currently Amended) The method of claim 1, where~~in~~ the step of determining a nominal radius from the polar coordinates determines the nominal radius from a radius component of the preliminary symbol~~digital signal (s) is a digitized signal (sd) which is digitized by a sampling and digitization device (3) locked to a digitization clock (td'), and that for the formation of the preliminary symbol (S), one of the subsequent devices (10; 14) takes from the digitized signal (sd) that data value which corresponds to the respective instant of the symbol sampling clock (ts) when the digitization clock (td) and the symbol sampling clock (ts) are mutually dependent in frequency and/or phase~~.

5. (Currently Amended) The method of claim 1, ~~wherein a selection of the nominal radii (Rs) is available for the generation of auxiliary symbol (Sh)~~further comprising the step of determining quadrature components of the auxiliary symbol from the determined nominal radius and the angle component.

6. (Currently Amended) The method of claim ~~5~~1, where~~in~~ ~~weighting factors are combined with~~ the determined nominal radii comprise radii on which predetermined symbols of the alphabet lie in the plane determined by the quadrature signal pair ~~(Rs)~~.

7. (Currently Amended) The method of claim 1, where~~in~~ at least one of the range limits is defined by a radius limit ~~(Rgi; Rgi'; Rsi+; Rsi-)~~.

8. (Currently Amended) The method of claim 7, where~~in~~ at least one of the radius limits ~~(Rgi'; Rsi+; Rsi-) does not~~ lies ~~midway~~ between ~~the~~ adjacent ones of the nominal radii ~~(Rs)~~.

9. (Currently Amended) The method of claim 1, where~~in~~ the step of determining nominal radii and range limits determines the range limits by defining limit radii that may comprise radii of a predetermined modulation standard~~the range limits between two adjacent nominal radii (Rs) are so defined that part of the range between the two adjacent nominal radii (Rs) is masked out for the generation of the auxiliary symbol (Sh)~~.

10. (Currently Amended) The method of claim ~~1~~9, where adjacent ones of the limit radii define an annulus that includes at least one of the nominal radii~~in for the acquisition process of decision-feedback controllers (11, 13, 14; 40, 13, 14) during reception of the digital signal (s), a decision symbol (Se) is replaced by the auxiliary symbol (Sh)~~.

11. (Currently Amended) A circuit ~~arrangement~~ for generating an auxiliary symbol ~~(Sh)~~ from a preliminary symbol ~~(S)~~ in a device ~~(1; 1')~~ for receiving a digital signal ~~(s)~~ locked to a quadrature signal pair ~~(I, Q)~~, comprising:

a resolver ~~(20) which~~ that converts ~~the~~ Cartesian quadrature signal components ~~(I, Q)~~ of the preliminary symbol ~~(S)~~ into polar coordinates ~~(R, a)~~; and

a radius decision stage ~~(21) which~~ that determines from the polar coordinates ~~(R, a)~~ of the preliminary symbol ~~(S)~~ the most probable nominal radius, where ~~(Rsi) which, together with~~ the most probable nominal radius and an ~~the~~ angle component ~~(a)~~ of the preliminary symbol ~~(S),~~ defines ~~the~~ polar coordinates ~~(Rsi, a)~~ of the auxiliary symbol ~~(Sh)~~.

12. (Currently Amended) The circuit of claim 11, further comprising ~~wherein~~ a second resolver ~~(23)~~ that converts the polar coordinates ~~(Rsi, a)~~ of the auxiliary symbol ~~(Sh)~~ to Cartesian coordinates ~~(Ih, Qh)~~ in a~~the~~ plane determined by the quadrature signal pair ~~(I, Q)~~.

13. (Currently Amended) The circuit of claim 12, where~~in the auxiliary symbol (Sh) is used as a decision symbol (Se) to control~~ at least one decision-feedback controller ~~(11, 13, 14; 40, 13, 14)~~ in the device utilizes the auxiliary symbol for control thereof ~~(1; 1')~~.

14. (Currently Amended) The circuit of claim 13, further comprising a multiplexer that selectively provides ~~wherein during the adjustment process,~~ the auxiliary symbol ~~(Sh) is fed~~ to the at least one decision-feedback controller for control thereof~~(11, 13, 14; 40, 13, 14) via a multiplexer (18) controlled by a controller (19)~~.

15. (Currently Amended) The circuit of claim 14, where~~in~~ the multiplexer selectively provides a decision symbol in place of the auxiliary symbol to the at least one decision-feedback controller~~(19) has its other signal input connected to a symbol decision stage (15) for decision symbols (Se), and that the multiplexer is switched from the auxiliary symbol (Sh) to a decision~~

~~symbol (Se) under control the controller (19) when the decision symbol (Se) definitely lies within the capture range of the respective decision-feedback controller (11, 13, 14; 40, 13, 14).~~

16. (Currently Amended) The circuit of claim 11, where~~in~~ the device ~~(1; 1')~~ comprises a demodulator that is provided ~~which is fed~~ with the digital signal ~~(s)~~ and determines and provides ~~delivers~~ the decision symbols in response thereto~~(Se) as a data stream~~.

17. (New) A method for adjusting at least one decision-feedback controller within a demodulator using an auxiliary symbol in place of a decision symbol, the method comprising the steps of:

receiving a digital signal locked to a quadrature signal pair;

determining nominal radii and range limits according to predetermined positions of the digital signal in a plane determined by the quadrature signal pair;

determining a preliminary symbol from the digital signal;

determining the auxiliary symbol from the preliminary symbol; and

adjusting the at least one decision-feedback controller in dependence on the preliminary symbol.

18. (New) The method of claim 17, where the step of determining the auxiliary symbol from the preliminary symbol comprises the steps of:

determining polar coordinates of the preliminary symbol;

determining a nominal radius from the polar coordinates of the preliminary symbol in accordance with the range limits, the determined nominal radius comprising one of the nominal radii; and

determining the auxiliary symbol in terms of polar coordinates thereof, the polar coordinates of the determined auxiliary symbol comprising the determined nominal radius and an angle component of the preliminary symbol.

19. (New) The method of claim 18, where after the step of determining the auxiliary symbol in terms of polar coordinates thereof, the method further comprises the step of determining quadrature components of the auxiliary symbol from the determined nominal radius and the angle component.

20. (New) The method of claim 17, where the determined nominal radii comprise radii in which predetermined symbols of the alphabet lie in the plane determined by the quadrature signal pair.